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EXAMINER

JARRETT, SCOTT L

ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 03/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/825,153

Applicant(s)

JACOBS ET AL.

Examiner

Scott L. Jarrett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

The attempt to incorporate subject matter into this application by reference to Enterprise Scheduling System (ESS) Function Specification, version 4.1 is improper (Specification; Page 4, Lines 13-16).

Appropriate correction required.

### ***Drawings***

2. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the current drawings are informal. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

***Claim Objections***

3. Claims 41 and 42 are objected to because of the following informalities: the claims are on the same set of lines. Appropriate correction is required.

***Claim Rejections - 35 USC § 101***

4. Claims 1-19 and 26-34 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result.

Regarding Claims 1-10, Claims 1-10 only recite an abstract idea. The recited method for configuring a schedule process does not apply, involve, or use the

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technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The claimed invention, as a whole, is not within the technological art as explained above claims 1-10 are deemed to be directed to non-statutory subject matter.

Mere intended or nominal use of a component, albeit within the technological arts, does not confer statutory subject matter to an otherwise abstract idea if the component does not apply, involve, use, or advance the underlying process. In the present case, none of the recited steps are directed to anything in the technological arts as explained above with the exception of the recitation of the term "programming." Therefore, the term discussed is taken to merely recite a field of use and/or nominal recitation of technology.

Regarding Claims 11-15, Claims 11-15 only recite an abstract idea. The recited method for performing a schedule process does not apply, involve, or use the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The claimed invention, as a whole, is not within the technological art as explained above claims 11-15 are deemed to be directed to non-statutory subject matter.

Mere intended or nominal use of a component, albeit within the technological arts, does not confer statutory subject matter to an otherwise abstract idea if the component does not apply, involve, use, or advance the underlying process. In the present case, none of the recited steps are directed to anything in the technological arts

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as explained above with the exception of the recitation of the terms "programming", and "programmed." Therefore, the terms discussed are taken to merely recite a field of use and/or nominal recitation of technology.

Regarding Claims 11-15, 26-27 and 28-34, Claims 11-15, 26-27 and 28-34 do not utilize the proper computer program product format and effectively recite software per se (descriptive material). Claims 11-15, 26-27 and 28-34 are therefore deemed to be directed to non-statutory subject matter where there is no indication that the proposed software is recorded on computer-readable medium and/or capable of execution by a computer. Examiner suggests that the applicant incorporate into Claims 11-15, 26-27 and 28-34 language that the proposed software is recorded on computer-readable medium and capable of execution by a computer to overcome this rejection.

Further Regarding Claims 28-34 the computer readable medium having stored a data structure thereon does not produce a useful, concrete, and tangible result. Claims 28 -34 are therefore deemed to be directed to non-statutory subject matter where there is no indication that the computer readable medium produces a useful, concrete and tangible result.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-29, 33 and 35-42 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Wolfinger et al., U.S. Patent No. 6,415,259.

Regarding Claims 1, 8 and 35 Wolfinger et al. teach a method for configuring a schedule process comprising (Abstract; Column 2, Lines 54-58; Column 3, Lines 1-68; Column 4, Lines 1-28; Column 6, Lines 56-68; Column 7, Lines 1-13 and 53-58; Column 9, Lines 1-68; Columns 10-12; Column 17, Lines 60-68; Figures 4-9):

- scheduling an order (appointment, service, etc.) into a shift (schedule, time slot, time periods) of a worker according to a set of rules (set of constraints, workflow, configurable criteria, parameters, constraints, templates, execution predicates, execution conditions, etc.); and

- configuring (programming) a set of rules to change the act of scheduling.

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Regarding Claims 2 and 36 Wolfinger et al. teach a scheduling system wherein configuring comprises programming a rule to control which orders are considered in the schedule (Column 3, Lines 27-68; Column 12, Lines 55-68; Column 16, Lines 18-68). More specifically Wolfinger et al. teach that the scheduling system utilizes a plurality of rules for determining which orders are to be considered including but not limited to order priority, due date, cost minimization, tightness, customer value, dependency, location and the like (Column 2, Lines 63-68; Column 3, Lines 27-68; Column 12, Lines 55-68; Column 16, Lines 18-68).

Regarding Claims 3 and 37 Wolfinger et al. teach a scheduling system wherein configuring comprises programming rule to control which workers are considered in the schedule process (Column 6, Lines 1-5; Column 5, Lines 34-52; Column 36, Lines 11-27). More specifically Wolfinger et al. teach that a plurality of rules (constraints, parameters, etc.) are used to control which workers are considered in the schedule process including but not limited to working calendar (calendar rule), existing schedule, availability, location, resource pools (skills) and the like (Column 5, Lines 34-52; Column 6, Lines 1-5; Column 11, Lines 38-65; Column 12, Lines 1-12; Column 36, Lines 11-27).

Regarding Claims 4 and 38 Wolfinger et al. teach a scheduling system wherein configuring comprises programming rule to control whether an order can be assigned to a worker (Column 2, Lines 63-68; Column 6, Lines 1-5; Column 5, Lines 34-52; Column 36, Lines 11-27). More specifically Wolfinger et al. teach that a plurality of rules



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(constraints, parameters, etc.) are used to control whether or not an order can be assigned to a worker including but not limited to working calendar (calendar rule), existing schedule, availability, location, resource pools and the like (Column 5, Lines 34-52; Column 6, Lines 1-5; Column 11, Lines 38-65; Column 12, Lines 1-12; Column 36, Lines 11-27).

Regarding Claims 5 and 39 Wolfinger et al. teach a scheduling system wherein configuring comprises programming a rule to provide (calculate, determine, evaluate, etc.) a value (score, parameter, etc.) when solving the scheduling problem (constraint programming, comparing workers to an order; evaluating business rules; Column 9, Lines 48-60).

Regarding Claims 6 and 40 Wolfinger et al. teach that the scheduling system further comprises programming a set of constants (variables, parameters, values, templates, etc.) to control the flow of execution within rules as discussed above. Wolfinger et al. further teaches the replacement of the global constants, e.g. utilization parameter, that would otherwise require the explicitly reference in the configured set of rules (Column 3, Lines 5-11; Column 5, Lines 10-16).

Regarding Claims 7, 10, 29 and 41 Wolfinger et al. teach a scheduling system wherein scheduling comprises negotiating (discussing, taking, placing, entering, etc.) a reservation (order, appointment, etc.), assigning the reservation (order), and optimizing

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the reservation (Abstract; Column 3, Lines 1-68; Column 4, Lines 1-28; Column 6, Lines 56-68; Column 7, Lines 1-13 and 53-58; Column 9, Lines 1-68; Columns 10-12; Column 17, Lines 60-68; Figures 6-8).

Regarding Claim 9, 19 and 28 Wolfinger teach a scheduling system further comprising the use of any of a plurality of rules/inference engines (Column 2, Lines 54-58; Columns 9-10). More specifically Wolfinger et al. teach that the scheduling system utilizes the ILOG rules/inference engine (ILOG Scheduler, ILOG Solver; Column 2, Lines 54-58; Columns 9-10; Figure 3, Element 103). It is inherent that a rules/inference engine, a system for managing and processing rules and facts (constants, parameters, variables, information, etc.) related to a specific problem and making associations and inferences resulting in recommended courses of action, includes programming a set of rules, each rule programmed in accordance with a rule language convention having:

- a rule identifier (unique identification, rule name, etc.); and
- a rule body (clause, content, expression, etc.),

without a means for identifying and expressing rules the system would have little practical value.

Regarding Claim 11 Wolfinger et al. teach a scheduling system for performing a schedule process, comprising (Abstract; Column 2, Lines 54-58; Column 3, Lines 1-68; Column 4, Lines 1-28; Column 6, Lines 56-68; Column 7, Lines 1-13 and 53-58; Column 9, Lines 1-68; Columns 10-12; Column 17, Lines 60-68; Figures 4-9):

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- programming a programmed constraint set (rules, expressions, etc.) to supplement or change a fixed constraint set (values, rules, expressions, templates, parameters, etc.); and
- executing a scheduling process that performs a process of scheduling orders to a worker in accordance with the programmed constraint set and the fixed constraint set.

Regarding Claim 12 Wolfinger et al. teach a scheduling system comprising programmed constraint sets wherein the programmed constraint sets comprises programmable rules and constants as discussed above.

Regarding Claim 13 Wolfinger et al. teach the translation of a plurality of rules from a defined configurable rule convention into a predefined grammar (ILOG; Column 9, Lines 25-68; Column 10, Lines 1-64; Column 11, Lines 1-68):

Regarding Claim 14 Wolfinger et al. teach compiling a plurality of rules into a library that is used when the scheduling process is performed (Column 11, Lines 49-51).

Regarding Claim 15 Wolfinger et al. teach a scheduling system wherein the execution (running, performing, etc.) of the scheduling process comprises performing the scheduling process according to a standard process (template) except where a plurality of rules have altered performance of the scheduling process to a reconfigured

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process (realistic workflow, actual workflow; Abstract; Column 2, Lines 54-58; Column 3, Lines 1-68; Column 4, Lines 1-28; Column 6, Lines 56-68; Column 7, Lines 1-13 and 53-58; Column 9, Lines 1-68; Columns 10-12; Column 17, Lines 60-68; Figures 4-9).

Regarding Claim 16 and 18 Wolfinger et al. teach a scheduling system (environment), comprising (Abstract; Column 2, Lines 54-58; Column 3, Lines 1-68; Column 4, Lines 1-28; Column 6, Lines 56-68; Column 7, Lines 1-13 and 53-58; Column 9, Lines 1-68; Columns 10-12; Column 17, Lines 60-68; Figures 4-9):

- a negotiator to negotiate the reservation of orders (Figure 6, Element 1020);

and

- an assigner to assign the orders to workers (order processing application server, schedule engine, workflow engine, workload server, resource and locking server, etc.),

the negotiator and assigner respectively negotiating and assigning the orders according to a constraint set including a fixed set of business rules (templates) and a set of programmable configuration rules (execution conditions, user-defined predicates, parameters, set of constraints, etc.).

Regarding Claim 17 Wolfinger et al. teach that the scheduling system further comprises an optimizer to optimize the reservation of orders (Abstract; Figure 4, Element 195; Column 2, Lines 63-68; Column 3, Lines 62-68; Column 4, Lines 1-3).

Regarding Claim 20 Wolfinger et al. teach a scheduling system comprising (Abstract; Column 2, Lines 54-58; Column 3, Lines 1-68; Column 4, Lines 1-28; Column 6, Lines 56-68; Column 7, Lines 1-13 and 53-58; Column 9, Lines 1-68; Columns 10-12; Column 17, Lines 60-68; Figures 4-9):

- the storing a set of rules have a set of fixed business rules and a set of configurable rules (memory, database, queue, etc.; Figure 3; Figure 4, Element 120; Figure 9); and
- the execution (running, performing, etc.) of a schedule process that performs a schedule process of scheduling orders and workers in accordance with a set of rules.

Regarding Claim 21 Wolfinger et al. teach a scheduling system wherein execution of the scheduling process includes invoking (calling, running, executing, using, etc.) rules from a defined location (memory, storage, database, program, application, library, etc.) in a negotiation algorithm (process, approach, procedure, steps, etc.; Abstract; Column 2, Lines 54-58; Column 3, Lines 1-68; Column 4, Lines 1-28; Column 6, Lines 56-68; Column 7, Lines 1-13 and 53-58; Column 9, Lines 1-68; Columns 10-12; Column 17, Lines 60-68; Figures 5-9; Figure 4, Element 120).

Regarding Claim 22 Wolfinger et al. teach a scheduling system wherein the system executes an assignment algorithm in accordance with a set of rules as altered by a set of configurable rules to assign orders to a worker (Abstract; Column 2, Lines 54-58; Column 3, Lines 1-68; Column 4, Lines 1-28; Column 6, Lines 56-68; Column 7,

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Lines 1-13 and 53-58; Column 9, Lines 1-68; Columns 10-12; Column 17, Lines 60-68; Figures 4-9).

Regarding Claim 23 Wolfinger et al. teach a scheduling system further executes an optimization algorithm in accordance with a set of rules as altered by a set of configurable rules to assign orders to workers (Abstract; Column 2, Lines 54-58 and 63-68; Column 3, Lines 1-68; Column 4, Lines 1-28; Column 6, Lines 56-68; Column 7, Lines 1-13 and 53-58; Column 9, Lines 1-68; Columns 10-12; Column 17, Lines 60-68; Figures 5-9; Figure 4, Element 195).

Regarding Claim 24 Wolfinger et al. teach a scheduling system wherein the system executes negotiation, assignment and optimization algorithms in accordance with the set of rules as altered by the set of configurable rules to schedule orders to a worker as discussed above.

Regarding Claim 25, Claim 25 recites similar limitations to Claims 13-14 and is therefore rejected using the same art and rationale as applied in the rejection of Claims 13-14.

Regarding Claim 26 and 27 Wolfinger et al. teach a scheduling system, comprising (Abstract; Column 2, Lines 54-58 and 63-68; Column 3, Lines 1-68; Column

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4, Lines 1-28; Column 6, Lines 56-68; Column 7, Lines 1-13 and 53-58; Column 9, Lines 1-68; Columns 10-12; Column 17, Lines 60-68; Figures 4-9):

- an algorithm (procedure, process, formula, rules, etc.) for negotiating the reservation of work orders (work to workers);
- an algorithm for assigning work orders to workers; and
- a set of rules that are invoked (called, executed, used, etc.), the set of rules including a fixed set of business rules augmented by a set of programmable rules for altering execution of the algorithms from execution according to only the fixed set of business rules.

Regarding Claim 33 Wolfinger et al. teach that the scheduling system rules operation includes a plurality of operators including but not limited to Boolean operators (Column 10, Lines 2-7).

Regarding Claim 42 Wolfinger et al. teach a scheduling system comprising the execution of a scheduling process that performs the process of scheduling orders to workers in accordance with a programmed constraint set and a fixed constraint set, the programmed constraint set augmenting the fixed constraint set to alter the performance of the schedule process to a desired configuration (Abstract; Column 2, Lines 54-58 and 63-68; Column 3, Lines 1-68; Column 4, Lines 1-28; Column 6, Lines 56-68; Column 7, Lines 1-13 and 53-58; Column 9, Lines 1-68; Columns 10-12; Column 17, Lines 60-68; Figures 4-9).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 30-32 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolfinger et al., U.S. Patent No. 6,415,259 as applied to claims 1-29, 33 and 35-42 above.

Regarding Claim 30-32 Wolfinger et al. teach a scheduling system further comprising a rules/inference engine, scheduling engine, order processing application server and the use of business rules and work order templates as discussed above.

Wolfinger et al. does not expressly teach the use of a variable label, brackets for identifying the variable label or a pair of braces for identifying the operator and rule body.

Official notice is taken that assigning a variable (custom, unique) label to a rule (set of rule, constraints, parameters, etc.) is old and well known in the art as a means for identifying, managing, accessing, and manipulating rules (data, constants, constraints, etc.) and further the use of delimiters (text or otherwise) as a means for



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visually or programmatically distinguishing (identifying) a plurality of parts (sections, operators, modules, etc.) of a rule is old and well known in the art.

Further “includes bracket delimiters” and “bounded by a pair of braces” represent non-functional language and are given no patentable weight. Non-functional descriptive material cannot render non-obvious an invention that would have otherwise have been obvious. See: *In re Fulack* 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983) *in re Dembiczak* 175 F.3d 994, 1000, 50 USPQ2d 1614, 1618 (Fed. Cir. 1999). See MPEP 2106.

It would have been obvious to one skilled in the art at the time of the invention that the scheduling system as taught by *Wolfinger et al.* would have included the ability to identify rules and their corresponding components (parts, sections, body, operator, etc.).

Regarding Claim 34 *Wolfinger et al.* teach that the scheduling system further comprises the utilization of a rules/inference engine and that the rules include a plurality of operators as discussed above.

*Wolfinger et al.* does not expressly teach that one of the rules operation includes a set operator.

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Official notice is taken that the inclusion of a set operator as part of a rules/inference engine is old and well known in the art as a means for grouping information (data, elements, etc.) of interest.

It would have been obvious to one skilled in the art at the time of the invention that the scheduling system as taught by Wolfinger et al., including is sophisticated rules/inference engine, would have benefited from providing the ability to group information, for the purpose of rule evaluation, using the set operator; the resultant system providing a more robust rules language for expressing the complexity of business processes.

***Examiner Note***

9. Examiner has cited particular sections, pages, and paragraphs or figures in the references applied to the claims for the convenience of the applicant. Although the specific citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Rassman et al., U.S. Patent No. 4,937,743, teach a rule-based mobile workforce scheduling system.

- Edgar et al., U.S. Patent No. 5,848,395, teach a workforce scheduling (booking and appointment) system for assigning orders to workers consisting of the negotiation of an appointment, assignment of the work to a worker and the optimization of the schedule.

- Levinson, Richard J., U.S. Patent No. 6,047,260, teaches a workforce-scheduling system that is rules-based and user-configurable.

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- Andre et al., U.S. Patent No. 6,278,978, teach a workforce scheduling system that evaluates a score function for each of a plurality of possible schedules.

- Whitehead, Susan, U.S. Patent Publication No. 2002/0199182, teaches a system for providing for the management of adaptive business applications. More specifically Whitehead teaches a workforce scheduling component (server provisioning module, sub-system) that utilizes the commercially available ClickSchedule workforce planning/scheduling software.

- Livneh, Eran, Case Study: Automating Service Allocation and Scheduling, teaches the implementation of a rules-based workforce scheduling system utilizing the commercially available W-6 Service Scheduler from Intelligent Electronics (IET) which enables the system to schedule a workforce utilizing a plurality of rules (skills, customer needs, etc.).

- ILOG.com teaches the commercial availability (8+ years in 2000) suite of tools (software packages, software, modules, etc.) from ILOG including but not limited to a rules/inference engine, customizable rules language and editor, rules kit, scheduler, optimizer and solver.

- ILOG.com, Field Service Dispatching White Paper, teaches a commercially available scheduling system for scheduling work to mobile workers (ILOG Dispatcher). The article further teaches that the system is fully customizable and applicable to a plurality of industries/businesses.

- Adhikari, Richard, Scheduling Solutions, teaches the widespread availability of workforce scheduling systems for mobile workforces (field-service businesses).

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Adhikari further teaches the implementation of such a system utilizing Intelligent Enterprises' W-6 Service Scheduler system (solution, application) and that the system takes into account a plurality of constraints/rules including but not limited to skills, availability, etc.

- Marshak, Ronni T., ClickSchedule the Online Buying Experience, teaches a rules-based online scheduling system by Intelligent Enterprise (ClickSchedule).

Marshake further teaches that the scheduling system can be reconfigured on the fly, is based on the W-6 Scheduling engine, includes a plurality of library functions and will include support for more complex rules/constraints.

- ClickSchedule.com teaches a commercially available, user configurable, rules-based, online scheduling system based on IET's W-6 Service Scheduler wherein the system enables users to negotiate, assign and optimize reservations.

- Gunes, Evrim Didem, Workforce Scheduling, teaches an overview of the workforce scheduling problem.

- Open-Wave.com teaches a commercially available, rules-based and user-configurable scheduling system (ShiftTrack) that has been used for over a decade (in 2000) in a plurality of industries/businesses.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott L. Jarrett whose telephone number is (703) 306-5679. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hafiz Tariq can be reached on (703) 305-9643. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SJ  
2/23/2005



TARIQ R. HAFIZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600